MySQL Installation and Set Up

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Installing MySQL on Windows

Option 1: XAMPP

- For the installation, use the "PHP_installation" document.

✅ Start MySQL

- Open **XAMPP Control Panel**
- Click **Start** next to **MySQL**

⛔ Stop MySQL

- Click **Stop** in XAMPP Control Panel

Option 2: MySQL Installer (Official)

- Download from mysql.com
- Choose **Server Only** or **Full Setup**
- Guided installation with GUI

Start/Stop MySQL

- Use **Services app** (`services.msc`) or
- Use **Command Prompt**:

```
net start MySQL80
net stop MySQL80
```

(Replace `MySQL80` with your actual service name)

Option 3: ZIP Archive (Manual Setup)

- Download MySQL **ZIP Archive** (not Installer)
- Extract to a folder (e.g., `C:\mysql`)
- Create `my.ini` file for configuration
- Initialize and install the service via the command line

Key Commands

```
mysqld --initialize --console
mysqld --install MySQL
net start MySQL
net stop MySQL
```

Summary of MySQL Windows Installation

Method	Difficulty	Best For
XAMPP	⭐ Easiest	Beginners, quick setup
MySQL Installer	⭐⭐ Medium	Structured install, GUI
ZIP Archive	⭐⭐⭐ Advanced	Full control, real-world setup

- MySQL was made for Linux and ported to Windows Later, so there are many options to choose from.

Recommendation

- Start with **XAMPP** for simplicity
- Use **Installer** or **ZIP** method to learn MySQL configuration and service management
- Practicing manual setup builds professional skills
- Ready to use Linux with Docker and WSL2.

Installing MySQL on macOS

1. Open Terminal.
2. Install Homebrew if not installed:
3. Install MySQL using Homebrew:

```
brew install mysql
```

Option 1: Running MySQL Using brew (Recommended)

- Start and stop MySQL service using brew (run mysql as a service):

```
brew services start mysql
brew services stop mysql
```

Option 2: Running MySQL Using mysql.server

- Start and stop MySQL service using the command:

```
mysql.server start
mysql.server stop
```

- You can use mysqladmin

```
 mysqladmin -u root -p shutdown
```

Installing MySQL on Linux (Ubuntu/Debian)

- Update packages

```
sudo apt update && sudo apt upgrade
```

- Install MySQL server

```
sudo apt install mysql-server
```

- Check status, start, and stop service

```
sudo systemctl status mysql
sudo systemctl start mysql
sudo systemctl stop mysql
```

Password Change

1. Verify installation by logging in:

```
mysql -u root -p
```

2. Change password

```
# choose any password you prefer
mysqladmin -u root password 'NewPassword'
```

Password security (Optional)

- For better security, you can change the password validation policy.
- Secure your root password right after installation.

```
mysql_secure_installation
```

- When you need to remove the password validation policy.

```
mysql -u root -p
UNINSTALL COMPONENT <file://component_validate_password';>
```

Tips and Best Practices

- Choose the version compatible with your OS and system.
- Use official MySQL sources or package managers.
- Consider any GUI tools for easier management.

Warnings When You Stop MySQL

- Stopping MySQL will disconnect all apps and users.
- Save your work before stopping.
- If you use **Homebrew**, `brew services start/stop mysql` is recommended.
- For managed installations, always use official scripts or the Services menu.